

# STEPTOE & JOHNSON LLP

ATTORNEYS AT LAW

1330 CONNECTICUT AVENUE, N.W.  
WASHINGTON, D.C. 20036-1795

PHOENIX, ARIZONA  
TWO RENAISSANCE SQUARE

TELEPHONE: (602) 257-5200  
FACSIMILE: (602) 257-5299

(202) 429-3000  
FACSIMILE: (202) 429-3902  
TELEX: 89-2503

STEPTOE & JOHNSON INTERNATIONAL  
AFFILIATE IN MOSCOW, RUSSIA

TELEPHONE: (011-7-501) 258-5250  
FACSIMILE: (011-7-501) 258-5251

BRENT H. WEINGARDT  
(202) 429-6753

October 25, 1995

## VIA HAND DELIVERY

Mr. William F. Caton, Acting Secretary  
Federal Communications Commission  
Room #222  
1919 M Street, N.W.  
Washington, D.C. 20554

OCT 25 1995

DOCKET FILE COPY ORIGINAL

Re: In the Matter of Streamlining The Commission's  
Rules and Regulations for Satellite Applications  
and Licensing Procedures, IB Docket No. 95-117

Dear Mr. Caton:

Enclosed please find for filing on behalf of Motorola Satellite  
Communications, Inc. an original and five copies of Reply Comments of Motorola  
Satellite Communications, Inc.

Also enclosed please find one copy of the Reply Comments of Motorola  
Satellite Communications, Inc. to be date stamped and returned with our messenger.

If there are any questions concerning this filing, please do not hesitate to  
contact me.

Respectfully submitted,

  
Brent H. Weingardt  
Counsel for Motorola Satellite  
Communications, Inc.

Enclosures

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

OCT 25 1995

**In the Matter of**

**Streamlining the Commission's Rules  
and Regulations for Satellite  
Applications and Licensing Procedures**

**IB Docket No. 95-117**

DOCKET FILE COPY ORIGINAL

**REPLY COMMENTS OF  
MOTOROLA SATELLITE COMMUNICATIONS, INC.**

**MOTOROLA SATELLITE  
COMMUNICATIONS, INC.**

**Michael D. Kennedy  
Vice President and Director  
Regulatory Relations  
Barry Lamberman, Manager  
Satellite Regulatory Affairs  
MOTOROLA, INC.  
1350 I Street, N.W.  
Washington, D.C. 20005  
(202) 371-6900**

**Philip L. Malet  
Alfred M. Mamlet  
Brent H. Weingardt  
STEPTOE & JOHNSON LLP  
1330 Connecticut Ave., N.W.  
Washington, D.C. 20036  
(202) 429-3000**

**Its Attorneys**

**Dated: October 25, 1995**

## **SUMMARY**

Motorola Satellite Communications, Inc. ("Motorola") supports the Commission's efforts to streamline its space station and earth station processing rules. The commenters overwhelmingly support these efforts and the Commission should move expeditiously to finalize its proposals.

The initial comments support the FCC's proposal to eliminate the need for a construction permit or Section 319(d) waiver prior to beginning construction of space stations. Contrary to Loral/QUALCOMM's suggestion, there is no reason to delay implementation of this proposal until the Commission has reviewed other portions of its satellite licensing process. Applicants should be permitted to begin construction of their satellite systems immediately after submitting an acceptable application and notifying the Commission that they are initiating construction at their own risk. The Commission is not required to place these construction notifications on public notice and permit public comments. To do so would simply replace one form of delay with another unnecessary regulatory procedure.

The Commission should also eliminate the construction permit requirement for the system control, gateway or feederlink earth stations that are part and parcel of a satellite system. The Commission has already done so for other types of earth stations and its justification for eliminating the permit requirement for space stations applies equally to these earth stations.

Motorola agrees with other commenters that the Commission should decrease the amount of information required in both applications and annual reports. The Commission should, however, ensure that its underlying financial requirements, construction deadlines and operating rules continue to be met.

As the commenters indicate, the application process can be further streamlined by eliminating separate system applications for each satellite in a system and adopting a new Form 312 for use by all applicants. For new satellite applications, Motorola urges the Commission to clarify that Appendix B has been superseded by Part 25 of the Rules and the new form.

The Commission should adopt its proposal to clarify that cut-off periods begin and end only upon the explicit direction of the Commission or its staff. There should be only one cut-off period for an application except in the most extraordinary circumstances. The Commission need no longer require prior authority for licensees to make "minor" changes to earth stations. It should, however, clarify what constitutes a "minor" change and extend this same flexibility to minor space station changes.

Motorola agrees with AT&T and others that the Commission should permit the use of broadband VSAT earth stations. Additional study is required before the Commission changes the EIRP density level for these stations as a general rule. The Commission should also provide an adequate definition of what constitutes a VSAT and the limits on its use.

Motorola continues to urge the Commission to review all of its technical rules to ensure that they reflect the operational differences between LEO and GSO satellite systems. In this regard, Motorola supports minor changes to the Commission's rules that would create a different power limit for LEO feeder links, a tighter emissions mask for LEO service links and clarification that the Commission's current antenna performance rules apply only to GSO operations.

Lastly, Motorola supports several proposals made by other commenters. It agrees with Loral/QUALCOMM that blanket licensing applies to Big LEO transceivers and that the Commission should clarify this point to the extent there is any doubt. Motorola also supports Loral/QUALCOMM's and Hughes Network Systems' claim that

the Commission should permit public comment on the out-of-band emission standard for MSS and GNSS that is under development by a private company. Motorola also agrees with AT&T and GE Americom that the Commission should establish some means of effectively extending the 10 year license term for satellites to better reflect a satellite's useful life using current technologies. Motorola agrees with Orion that the Commission should re-think the processing dichotomy that exists for domestic and international receive-only earth stations. For that matter, the Commission should carefully review all of its processing procedures to ensure that any distinctions between domestic and international facilities continue to have relevance.

## **TABLE OF CONTENTS**

	<b><u>Page</u></b>
SUMMARY .....	i-iii
I. THE COMMISSION SHOULD WAIVE THE CONSTRUCTION PERMIT REQUIREMENT OF SECTION 319(D) OF THE COMMUNICATIONS ACT FOR ALL SATELLITE SYSTEMS AND EARTH STATIONS .....	2
A. Waiver for Satellite Systems .....	2
B. Waiver for Earth Stations .....	5
II. THE COMMISSION'S PROPOSAL TO SIMPLIFY THE FINANCIAL SHOWING FOR SYSTEM APPLICATIONS MUST BE LINKED TO ITS FIRM ENFORCEMENT OF THE UNDERLYING QUALIFICATION STANDARDS .....	7
III. THE COMMISSION SHOULD STREAMLINE ITS APPLICATION PROCEDURES FOR SATELLITE SPACE STATIONS AND EARTH STATIONS .....	7
IV. THE COMMISSION SHOULD CLARIFY THAT CUT-OFF PERIODS BEGIN ONLY UPON SPECIFIC NOTICE .....	9
V. MOTOROLA SUPPORTS THE END OF PRIOR AUTHORIZATION FOR "MINOR" EARTH STATION AND SATELLITE MODIFICATIONS .....	10
VI. MOTOROLA SUPPORTS THE ELIMINATION OF BANDWIDTH LIMITATIONS ON EARTH STATIONS .....	11
VII. THE COMMISSION SHOULD REVIEW ITS TECHNICAL RULES TO ENSURE THEY ADEQUATELY REFLECT THE DIFFERENCES BETWEEN GSO AND LEO SATELLITES .....	12
VIII. MOTOROLA SUPPORTS SEVERAL OF THE ADDITIONAL PROPOSALS MADE BY THE COMMENTERS .....	13
IX. CONCLUSION .....	15

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC 20554**

In the Matter of

Streamlining the Commission's Rules  
and Regulations for Satellite  
Applications and Licensing Procedures

IB Docket No. 95-117

**REPLY COMMENTS OF MOTOROLA SATELLITE COMMUNICATIONS, INC.**

Motorola Satellite Communications, Inc. ("Motorola") hereby submits its Reply Comments in response to the initial comments filed on the proposals set forth in the Commission's Notice of Proposed Rulemaking ("NPRM") in the above-captioned proceeding.<sup>1/</sup>

The Comments overwhelmingly support the Commission's efforts to improve the speed and efficiency of its space station and earth station application and licensing processes by simplifying its Rules. In particular, the Comments strongly support the Commission's proposal to eliminate the need for prior construction authorization or a Section 319(d) waiver for space stations. Motorola believes that the Commission should eliminate the waiver process and replace it with a process whereby applicants notify the Commission prior to the start of construction irrespective of any

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<sup>1/</sup> Streamlining the Commission's Rules and Regulations for Satellite Application and Licensing Procedures, Notice of Proposed Rulemaking, FCC 95-117 (released August 11, 1995). The initial commenters were Motorola Satellite Communications, Inc., AT&T Corp., American Mobile Satellite Corporation, Comsearch, CTA Incorporated, EDS Corporation, GE American Communications, Keystone Communications Corporation, Home Box Office, Hughes Communications Galaxy, Inc., Hughes Network Systems, Inc., Loral/QUALCOMM Partnership, L.P., MCI Telecommunications Corporation, Orbital Sciences Corporation, Orion Network Systems, Inc., PanAmSat Corporation, and Teledesic Corporation.

future action the Commission might take to modify the spectrum/orbit assignment process.<sup>2/</sup> Motorola also recommends that the Commission expand this construction notification procedure to include all earth station complexes that serve as control points and/or gateways for space stations. The initial Comments also support the need to simply financial showings and other application information; the creation of consolidated system proposals for new satellite applicants; the initiation of cut-off periods only upon explicit Commission direction; the creation of a consolidated Form 312; a notification procedure for minor changes to earth stations and the elimination of bandwidth limitations for VSATs.

Motorola's interest in this proceeding is two-fold. First, Motorola recently received a license from the Commission's International Bureau to construct, launch and operate the IRIDIUM® System in the 1.6 GHz MSS/RDSS band on a bi-directional basis.<sup>3/</sup> In addition, Motorola, through its Comm, Inc. affiliate, recently submitted an application to provide broadband GSO FSS in the 28/18 GHz bands.<sup>4/</sup>

**I. THE COMMISSION SHOULD WAIVE THE CONSTRUCTION PERMIT REQUIREMENT OF SECTION 319 OF THE COMMUNICATIONS ACT FOR ALL SATELLITE SYSTEMS AND EARTH STATIONS**

**A. Waiver for Satellite Systems**

The initial comments support the Commission's proposal to eliminate the construction permit and ad hoc Section 319(d) waiver requirements for space stations.<sup>5/</sup> As AT&T notes, the Commission's proposal will have at least two positive impacts on

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<sup>2/</sup> International Bureau to Review Satellite Licensing Policies: Industry Dialogue Sought, Public Notice, Report No. IN 95-25.

<sup>3/</sup> Motorola Satellite Communications, Order and Authorization, 10 FCC Rcd 2268 (1995).

<sup>4/</sup> Comm, Inc.'s GSO-FSS application was filed with the Commission on September 29, 1995. See FCC File Nos. 156-162-Sat-P/LA-95.

<sup>5/</sup> Comments of Hughes Communications Galaxy, AT&T, GE Americom, PanAmSat, Orbital Sciences and Teledesic.



the processing of satellites. "Elimination of the permit requirement will avoid the administrative costs and burdens associated with the waiver process, and the proposed notice/acknowledgement will serve to apprise the Commission of industry activity, without any possibility of misunderstanding that the applicant is, in fact, undertaking construction at its own risk.<sup>6/</sup>

Motorola also agrees with GE Americom that the Commission should clarify that notification of construction and the start of construction cannot begin until the potential operator has an application to construct, launch and operate a space station on file with the Commission. Any construction activities must then be consistent with the terms of that application.<sup>7/</sup> Motorola continues to urge the Commission to go one step further in this regard. Before an applicant is allowed to submit a notification of construction and begin the underlying construction of a space station, it should have a minimally acceptable application on file with the Commission as determined by the staff.<sup>8/</sup>

Motorola does not agree with GE Americom, however, on the need to place notification requests on public notice with the opportunity for public comment.<sup>9/</sup> GE Americom's proposal suggests that the Commission will need to take further action on the construction notification before the applicant can begin construction. This process would only serve to replace the current Section 319(d) waiver process, and its accompanying delays and administrative burdens, with a new process for approving construction notification submissions. Such a result clearly was not the intent of the

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<sup>6/</sup> Comments of AT&T at 2-3.

<sup>7/</sup> Comments of GE Americom at 3-4.

<sup>8/</sup> Motorola continues to urge the Commission to set out in an affirmative rule the terms and conditions for submitting construction notifications. Such a rule will remove any potential for future misunderstandings that construction is entirely at an applicant's own risk.

<sup>9/</sup> Comments of GE Americom at 6.

Commission's original proposal nor is individual public notice (and opportunity to comment or petition to deny) mandated by Section 319(d) of the Communications Act. The Commission has proposed to simplify the current process, not replace one form of waiver process with another. "This proposal will diminish the administrative burdens both to applicants and to the Commission staff associated with the processing of construction permit applications and requests for Section 319(d) waivers."<sup>10/</sup> Congress granted the Commission the flexibility to waive the construction permit requirement either on a case-by-case basis or for an entire class of stations.<sup>11/</sup> Through this NPRM, the Commission has tentatively concluded to exercise its authority to waive prior construction authority for an entire class of stations and set out its "public interest, convenience and necessity" determination for this generic waiver.<sup>12/</sup>

Motorola disagrees with Loral/QUALCOMM's suggestion that the Commission defer any action on this proposal until it has completed a comprehensive review of its satellite licensing policies. Loral/QUALCOMM's point, at least as Motorola understands it, is that the delays associated with the Commission's satellite licensing process -- which is the reason underlying the Commission's proposal to streamline the 319(d) waiver process -- are not cured by allowing construction to proceed during the licensing process.<sup>13/</sup>

The Commission currently processes satellite applications in an integrated manner. Applicants generally are required to submit applications to construct, launch and operate space stations. Absent a Section 319(d) waiver, an

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<sup>10/</sup> NPRM at ¶ 8.

<sup>11/</sup> "With respect to any other station or class of stations the Commission shall not waive such [permit for construction] requirement unless the Commission determines that the public interest, convenience and necessity would be served by such a waiver." 47 U.S.C. § 319(d)(emphasis added).

<sup>12/</sup> NPRM at ¶ 7-8.

<sup>13/</sup> See Loral/QUALCOMM Comments at 3.

applicant must await Commission action on all three requests before beginning construction. While Loral/QUALCOMM may be correct that other portions of this licensing process contribute to the delay in bringing satellite proposals to market, it can hardly disagree that significant delays would be avoided if applicants could begin construction prior to receiving permanent launch and operating authority.

The Commission's proposal to speed the "front end" of its licensing process by permitting an applicant to begin construction without a construction permit can be adopted without prejudicing any other improvements to the licensing process that the Commission might later adopt. Irrespective of how the Commission ultimately decides to assign spectrum and orbital locations, allowing applicants to begin construction at their own risk without a permit or waiver will hasten the day when an applicant can provide service to the public.

#### **B. Waiver for Earth Stations**

Based on the broad support received for the proposal to eliminate construction permits for space stations, Motorola believes the Commission should expand this proposal to encompass all earth station complexes that serve as control points and/or gateways for satellite systems.

The Commission has already eliminated the pre-construction authorization requirement for certain types of earth stations.<sup>14/</sup> In 1991, the Commission removed these requirements for earth stations operating with domestic satellites, separate international satellites, INTELSAT international business service, and multipurpose earth stations operating with INTELSAT or INMARSAT space stations. In lieu of requiring a construction permit, the Commission conditions the

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<sup>14/</sup> Amendment of Part 25 of the Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacing and to Revise the Application Processing Procedures for Satellite Communications Services, First Report and Order, 6 FCC Rcd 2806 (1991).

licenses for these earth stations upon the licensee's filing a certificate of completion of construction and commencement of operations within 12 months of licensing.<sup>15/</sup>

At that time, the Commission did not remove the construction permit requirement for earth stations used as feeder links in the Mobile Satellite Services because "these services have not yet been firmly established."<sup>16/</sup> In its initial proposal, the Commission explained,<sup>17/</sup>

The major consideration...is to prevent the possibility of prejudgment of Commission action by premature construction or investment. In cases where competing applications are involved or where licensing policies and procedures for that service have not become routine, particularly where the proposed station requires a large investment, a construction permit will still be required.<sup>18/</sup>

The Commission's current streamlining proposal effectively rejects these concerns. While the Commission recognizes that space stations involve a significant investment in capital, it proposes to leave construction decisions to the applicant with the clear understanding that its investment "will not predispose us to grant its future application."<sup>19/</sup> As the investment in space stations is far greater than that for system control, feederlink or gateway earth stations, and these earth stations are required for the operation of space stations, the Commission's justification for ending the construction permit requirement for space stations applies equally, if not more, to all

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<sup>15/</sup> Id. at 2809.

<sup>16/</sup> Id. at 2809, n.48.

<sup>17/</sup> Amendment of Part 25 of the Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacing and to Revise the Application Processing Procedures for Satellite Communications Services, Notice of Proposed Rulemaking, 2 FCC Rcd 762 (1987).

<sup>18/</sup> Id. at 792,n.43 and 45.

<sup>19/</sup> NPRM at ¶7.

types of earth stations. The Commission can and should extend this streamlining benefit to the earth stations that are an integral part of a satellite system.<sup>20/</sup>

**II. THE COMMISSION'S PROPOSAL TO SIMPLIFY THE FINANCIAL SHOWING FOR SYSTEM APPLICATIONS MUST BE LINKED TO ITS FIRM ENFORCEMENT OF THE UNDERLYING QUALIFICATION STANDARDS**

The commenters voice universal support for the Commission's tentative decision to decrease the amount and type of financial and other data it requires of satellite applicants and the information required of licensees through annual reports.<sup>21/</sup> Motorola continues to support this aspect of the Commission's streamlining proposals. The Commission should, however, take every precaution to ensure that financially unqualified applicants will not tie up valuable spectrum irrespective of the financial information it requires in the application process. Moreover, its annual reporting requirement must solicit enough information to determine whether a licensee is constructing its system in a timely manner and using its original spectrum and orbital slots in accordance with its Commission authorization.

**III. THE COMMISSION SHOULD STREAMLINE ITS APPLICATION PROCEDURES FOR SATELLITE SPACE STATIONS AND EARTH STATIONS**

The comments support the Commission's initiatives to end the piecemeal approach to satellite application information requirements. Motorola urges the Commission to adopt its initiatives with certain clarifications and additions.

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<sup>20/</sup> As Motorola indicated in its initial Comments, the Commission's concerns over limiting the size of in-orbit satellite experimental licenses are based on the same rationale that it has tentatively rejected in this proceeding. Motorola Comments at 4. Therefore, the Commission should permit unlimited in-orbit experimental programs at the applicant's own risk.

<sup>21/</sup> Comments of Loral, Hughes Galaxy, CTA, AT&T, GE Americom, PanAmSat, Orbital Sciences and MCI.

Along with the rest of the commenters, Motorola supports the elimination of the requirement to file separate applications for each identical space station.<sup>22/</sup> Motorola agrees with Orbital Sciences Corporation, however, that system applications should clearly state the total number of proposed spacecraft per system.<sup>23/</sup> Motorola also suggests that the Commission clarify that applicants must provide in chart or summary form the orbital slot (if applicable) or orbital planes as well as the intended frequency reuse for each satellite in a system.

All commenters support the creation of a new FCC Form 312.<sup>24/</sup> Motorola agrees with AT&T that the Commission should make Form 312 available in a software version and with GE Americom that the Commission permit electronic filings.<sup>25/</sup>

Motorola continues to urge the Commission to modify its proposed Form 312 to include all of the information needed for any type of space station application so that the proper completion of this form represents a minimally acceptable application. At the same time, Motorola asks the Commission to clarify that applicants for new space stations need no longer meet the requirements of "Appendix B" from the FCC's 1983 Processing Order.<sup>26/</sup> It is Motorola's understanding that the Commission intended to incorporate all of the Appendix B requirements into Part 25 of the Rules; however, the requirements listed in Appendix B and the Rules are not identical. The Commission would eliminate much needless effort and confusion on the part of applicants if it were to expressly declare that Appendix B has been superseded by its satellite Rules and application forms.

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<sup>22/</sup> Comments of Loral, Hughes Galaxy, CTA, AT&T, and Orbital Sciences.

<sup>23/</sup> Comments of Orbital Sciences at 4.

<sup>24/</sup> See e.g., Comments of Comsearch, Loral, Hughes Network, Hughes Galaxy, AT&T, GE Americom, Orbital Sciences and EDS.

<sup>25/</sup> AT&T Comments at 12-13; GE Americom Comments at 16.

<sup>26/</sup> Filing of Applications for New Space Stations in the Domestic Fixed-Satellite Service, 93 FCC 2d 1265 (1983).

Motorola agrees with AT&T, Comsearch and Orbital Sciences that the Commission should eliminate those portions of its Rules that replicate the detailed international coordination requirements of Appendix 28 of the ITU Radio Regulations. Appendix 28 and Resolution 46 (WARC-92), as amended, should be the sole source of guidance as to the coordination process for earth stations and space stations. The Commission need do no more than reference the need to meet the current requirements of Appendix 28 and Resolution 46 in its Rules and make those materials available to the public. Motorola agrees with those commenters who request that the Commission make these materials conveniently available to the public in an up-to-date version. For example, both Orbital Sciences and Comsearch suggest that Appendix 28 be placed on the Internet. Motorola supports this suggestion.<sup>27/</sup>

#### **IV. THE COMMISSION SHOULD CLARIFY THAT CUT-OFF PERIODS BEGIN ONLY UPON SPECIFIC NOTICE**

The comments support the FCC's tentative decision to clarify that satellite cut-off periods will only begin upon an explicit order of the Commission or its staff.<sup>28/</sup> Motorola agrees with Loral/QUALCOMM that the staff should have the flexibility to establish cut-off periods of greater than 30 days if warranted.<sup>29/</sup> For example, in response to the recent 28 GHz band cut-off notice, the Commission received 14 applications totaling thousands of pages. These applicants clearly required more than 30 days to prepare and file comprehensive applications. Depending upon the outcome of this proceeding, it may be possible to file streamlined applications in less time.

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<sup>27/</sup> The Commission should ensure that Appendix 28 and Res. 46, which has the force of an FCC rule, are readily accessible on a nationwide basis in a manner comparable to the current Federal Register/Code of Federal Regulations system. The Internet is one such means of providing nationwide availability without the Commission incurring substantial costs.

<sup>28/</sup> Comments of Loral, Hughes Galaxy and Orbital Sciences.

<sup>29/</sup> Loral/QUALCOMM Comments at 8.

Motorola again urges the Commission to conclude that pending satellite applicants will not routinely be subjected to more than one cut-off period wherein competing applications or petitions may be filed.<sup>30/</sup> Multiple cut-off periods disrupt the planning process for applicants and delay the advent of services to the public. The Commission can easily avoid the disruptive impact of multiple cut-off periods by creating sufficient time to explore all matters and file competing applications in response to the original cut-off period.

#### **V. MOTOROLA SUPPORTS THE END OF PRIOR AUTHORIZATION FOR "MINOR" EARTH STATION AND SATELLITE MODIFICATIONS**

While the Commission received broad support for its proposal to eliminate the need to seek prior authority before making "minor" changes to earth stations, several commenters set out some definitional concerns.<sup>31/</sup> For example, EDS asks the Commission to clarify which changes or additions to antenna facilities do not require prior approval.<sup>32/</sup> Keystone Communications suggests that prior authority should not be required unless there is an increase in EIRP, EIRP density, transmitter power or a change in geographic coordinates for C-band facilities.<sup>33/</sup> These comments suggest that the Commission further attempt to identify which earth station modifications can be made without prior authorization. The Commission's tentative conclusion that "minor" modifications are those that do not have the potential to increase interference to adjacent satellites<sup>34/</sup> may not be completely encompassed by

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<sup>30/</sup> See Motorola Comments at 7-8.

<sup>31/</sup> See Comments of Comsearch, MCI, Loral/QUALCOMM, Hughes Network, AT&T, GE Americom, EDS and Keystone Communications.

<sup>32/</sup> EDS Comments at 6.

<sup>33/</sup> Keystone Communications Comments at 4.

<sup>34/</sup> NPRM at ¶ 23.



proposed Section 25.118 of its Rules. Based upon the comments, this Rule may need to be re-drafted to identify which modifications can be made without prior authority.

For the same reasons, the Commission should also extend this principle to eliminate prior authorization for minor changes to space stations in order to permit operators to proceed with construction and operation of these stations, as modified, without further Commission authority. A request to make a small change in the design of a space station, and the resulting processing delays could result in delays in bringing service to the public, as well as adding needlessly to the administrative burdens of the staff.

#### **VI. MOTOROLA SUPPORTS THE ELIMINATION OF BANDWIDTH LIMITATIONS ON EARTH STATIONS**

The Comments reflect the need for the Commission to facilitate the growth of a new generation of broadband FSS satellite systems by permitting the use of wideband earth stations.<sup>35/</sup> Motorola agrees with AT&T and others that bandwidth is not a determining factor in whether a VSAT will cause interference. Rather, it is the EIRP density level.<sup>36/</sup> Motorola further agrees with AT&T that additional study is required to determine if the 1986 EIRP density level limit of 6 dBW/4 kHz for VSATs should be changed. Until such a change is made, the Commission should act on requests to exceed this limit on a case-by-case basis.<sup>37/</sup>

However, the proliferation of VSAT use today and its expected future uses at Ka-band suggest that the Commission needs to provide an adequate definition of what a VSAT is and the limits on its use. For example, as Motorola noted in its initial comments, MSS feeder links cannot be shared with GSO FSS systems operating with

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<sup>35/</sup> Comments of Hughes Network, AT&T, GE Americom, Orion, EDS and Keystone Communications.

<sup>36/</sup> AT&T Comments at 9.

<sup>37/</sup> AT&T Comments at 9-12.

an unrestricted number of VSATs.<sup>38/</sup> Under the instant Commission proposal, unlimited broadband VSAT operations would exacerbate an already difficult sharing situation. The Commission should clarify that VSAT operations will be limited to established VSAT bands or that broadband VSAT operations will be limited to bands other than those designated for MSS feeder links.

**VII. THE COMMISSION SHOULD REVIEW ITS TECHNICAL RULES TO ENSURE THEY ADEQUATELY REFLECT THE DIFFERENCES BETWEEN GSO AND LEO SATELLITES**

As part of its effort to streamline the Rules, the Commission should review all of its technical rules to ensure that they reflect the operational differences between geostationary (GSO) and low earth orbit (LEO) operations for Fixed-Satellite Services and Mobile-Satellite Services. In its initial comments, Motorola provided the Commission with several rules that should be modified to reflect non-GSO operations.<sup>39/</sup> Motorola believes that these amendments are in keeping with the Commission's goals in this proceeding and should be considered now rather than in a future rulemaking.

For example, Motorola supports an amendment to the power limit of Section 25.204(e) to differentiate between the requirements of GSO and LEO space stations.<sup>40/</sup> Under Motorola's proposal, the power limit for LEO earth stations transmitting to space stations below 2000 km may exceed the specified uplink EIRP in the station authorization under conditions of uplink fading due to precipitation by an amount not to exceed an average of 3 dB above the actual amount of monitored excess attenuation.

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<sup>38/</sup> Motorola Comments at 9.

<sup>39/</sup> Motorola Comments at 9-12.

<sup>40/</sup> 47 C.F.R. § 25.204(e)

Motorola also supports a clarifying amendment to the spectral emissions limits in Section 25.202(f) of the Rules.<sup>41/</sup> This clarification should account for various modulation techniques, multiple access techniques (such as CDMA, TDMA, and FDMA), multiple carrier systems, varying carrier bandwidths and systems employing power control to overcome attenuation due to atmospherics.

Finally, the Commission should clarify that its antenna performance standards and technical requirements are meant to apply to earth station antennas used only within GSO systems.<sup>42/</sup> Motorola further urges the Commission to determine what performance standards and requirements should apply to LEO earth station antennas.

#### **VIII. MOTOROLA SUPPORTS SEVERAL OF THE ADDITIONAL PROPOSALS MADE BY THE COMMENTERS**

Several of the commenters provided the Commission with suggestions for improving or clarifying the Rules to reflect the new realities of the satellite industry. Motorola supports several of these proposals.

First, it agrees with Loral/QUALCOMM that the Commission should clarify that its revised Rule 25.115(d) permits the blanket licensing of user transceivers operating with MSS Above 1 GHz satellite systems (Big LEOs).<sup>43/</sup> The current version of Rule 25.115(d) allows for the use of blanket licensing consistent with the Commission's 1994 Big LEO Report and Order.<sup>44/</sup> Motorola believes that the version of 25.115(d) in the NPRM reflects an inadvertent deletion of the Big LEO language. Motorola also supports Loral/QUALCOMM's and Hughes Network Systems' suggestion

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<sup>41/</sup> 47 C.F.R. § 25.202(f)(1)(2) and (3).

<sup>42/</sup> 47 C.F.R. §§ 25.209, 25.132, and 25.210.

<sup>43/</sup> Loral/QUALCOMM Comments at 11.

<sup>44/</sup> Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, Report and Order, 9 FCC Rcd 5936 (1994).

that the Commission allow for public comment on the out-of-band emission standard for MSS and a global navigational satellite system (GNSS) that is under development by a private company, RTCA, Inc., before implementing any such standard<sup>45/</sup>.

Next, Motorola supports the proposals by AT&T and GE Americom to simplify the process through which the Commission extends the license term of satellites with greater than a 10 year useful life.<sup>46/</sup> While Section 307(c) of the Communications Act authorizes the Commission to grant licenses up to 10 years, the typical useful life of today's geostationary satellites exceeds this timeframe. The Commission could permit licensees to extend their licenses for up to two years through a notification procedure as suggested by GE Americom, or ask Congress to amend the Communications Act to reflect this new technical reality.

Lastly, Motorola agrees with Orion that the Commission should re-think the existing dichotomy between its treatment of domestic and international receive-only earth stations.<sup>47/</sup> Given the Commission's proposal to eliminate the regulatory distinctions between U.S. domestic and separate international satellite systems,<sup>48/</sup> maintaining two distinct processes for these types of earth stations may no longer be justified. In addition, the Commission should carefully review its processing procedures for all earth stations to ensure that any distinctions between domestic and international processing procedures or information requirements continue to have relevance.

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<sup>45/</sup> Loral/QUALCOMM Comments at 11-12; Hughes Network Systems Comments at 10.

<sup>46/</sup> AT&T Comments at 5-6; GE Americom Comments at 5.

<sup>47/</sup> Orion Network Systems Comments at 3; See also, Keystone Communications Comments at 5.

<sup>48/</sup> Amendment to the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, Notice of Proposed Rulemaking, 10 FCC Rcd 7789 (1995).

## **IX. CONCLUSION**

The Commission's proposals in this proceeding, coupled with its commitment to evaluate its space station assignment and licensing policies next year, will go a long way toward ensuring that U.S. satellite applicants are able to bring service proposals to the marketplace within a reasonable time and with minimal administrative or regulatory delays. The speed and efficiency of this process is critical to the ability of U.S. satellite operators to compete with emerging foreign satellite systems that intend to offer services in the same global, regional or national markets.

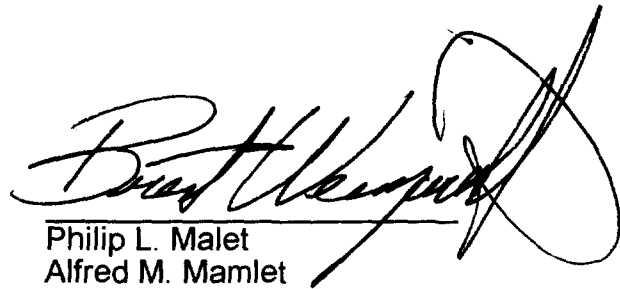
Eliminating the requirement that applicants receive prior authority to begin construction of their satellites or seek a waiver of this requirement will shave months, if not years, from the time when these new services are available to consumers. Extending this decision to the gateway and feederlink earth station complexes that are integral to the new satellite networks would be consistent with the Commission's rationale for elimination of prior construction authority.

Motorola commends the Commission for focusing on the detailed changes to its processes and rules that should have a positive impact on one of its fundamental goals: bringing new communications services to the public as rapidly and efficiently as possible. The Commission should move as quickly as possible to finalize these proposals.

Respectfully submitted,

**MOTOROLA SATELLITE  
COMMUNICATIONS, INC.**

Michael D. Kennedy  
Vice President and Director  
Regulatory Relations  
Barry Lambergman, Manager  
Satellite Regulatory Affairs  
**MOTOROLA, INC.**  
1350 I Street, N.W.  
Washington, DC 20005  
(202) 371-6900

A large, stylized handwritten signature in black ink, likely belonging to Philip L. Malet, is written over a horizontal line.

Philip L. Malet  
Alfred M. Mamlet  
Brent Weingardt  
**STEPTOE & JOHNSON LLP**  
1330 Connecticut Ave., N.W.  
Washington, DC 20036  
(202) 429-3000

Its Attorneys

Dated: October 25, 1995

## **CERTIFICATE OF SERVICE**

I, Brent H. Weingardt, hereby certify that copies of the foregoing Reply Comments of Motorola Satellite Communications, Inc. were served by first-class mail, postage prepaid, this 25th day of October, 1995, on the following persons:

- \* Chairman Reed Hundt  
Federal Communications Commission  
Rm. 814  
1919 M Street, N.W.  
Washington, D.C. 20554
- \* Commissioner James H. Quello  
Federal Communications Commission  
Rm. 802  
1919 M Street, N.W.  
Washington, D.C. 20554
- \* Commissioner Andrew C. Barrett  
Federal Communications Commission  
Rm. 826  
1919 M Street, N.W.  
Washington, D.C. 10554
- \* Commissioner Rachelle B. Chong  
Federal Communications Commission  
Rm. 844  
1919 M Street, N.W.  
Washington, D.C. 20554
- \* Commissioner Susan Ness  
Federal Communications Commission  
Room 832  
1919 M Street, N.W.  
Washington, D.C. 20554
- \* Scott Blake Harris  
Chief, International Bureau  
Federal Communications Commission  
Room 800, Stop Code 0800  
2000 M Street, N.W.  
Washington, D.C. 20554

\* Hand Delivery.

\* Thomas Tycz  
Division Chief  
Satellite and Radiocommunication Division  
International Bureau  
Federal Communications Commission  
Room 6010  
2025 M Street, N.W.  
Washington, D.C. 20554

\* Harold Ng  
Chief, Engineering Branch  
Federal Communications Commission  
2025 M Street, N.W.  
Room 6104  
Washington, D.C. 20554

\* Karl A. Kensinger  
Federal Communications Commission  
1919 M Street, N.W.  
Room 314  
Washington, D.C. 20554

\* Fern J. Jarmulnek  
Federal Communications Commission  
2025 M Street, N.W.  
Room 6112  
Washington, D.C. 20554

\* Cecily J. Holiday  
Federal Communications Commission  
2025 M Street, N.W.  
Room 6324  
Washington, D.C. 20554

Mark C. Rosenblum  
Peter H. Jacoby  
Judy Sello  
Room 3244J1  
295 North Maple Avenue  
Basking Ridge, New Jersey 07920  
(for AT&T Corp.)

Lon C. Levin  
Vice President and Regulatory Counsel  
American Mobile Satellite Corporation  
AMSC Subsidiary Corporation  
10802 Parkridge Boulevard  
Reston, VA 22091

\* Hand Delivery.



Christopher R. Hardy  
Director, Microwave and Satellite Services  
COMSEARCH  
2022 Edmund Halley drive  
Reston, Virginia 22091

Michael J. Ladino  
General Counsel  
CTA Incorporated  
Suite 800  
6116 Executive Blvd.  
Rockville, MD 20852

Phillip L. Spector  
Susan E. Ryan  
Paul, Weiss, Rifkind, Wharton  
& Garrison  
Suite 1300  
1615 L Street, N.W.  
Washington, D.C. 20036-5694

Randolph J. May  
Timothy J. Cooney  
Sutherland, Asbill & Brennan  
1275 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004  
(for EDS Corporation)

Philip V. Otero  
Alexander P. Humphrey  
GE American Communications, Inc.  
1750 Old Meadow Road  
McLean, VA 22102

Benjamin J. Griffin  
Enrico C. Soriano  
Reed, Smith, Shaw & McClay  
1301 K Street, N.W.  
Suite 1100 - East Tower  
Washington, D.C. 20005  
(for Home Box Office)

James F. Rogers  
Steven H. Schulman  
Lathan & Watkins  
1001 Pennsylvania Avenue, N.W.  
Suite 1300  
Washington, D.C. 20004  
(for Hughes Communications Galaxy, Inc.  
and Hughes Network Systems, Inc.)